

Qualitative risk analysis:

Animal disease outbreaks in countries outside the UK

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1. Introduction

We use qualitative risk analysis (RA) to ensure that we comply with our obligations under the World Trade Organisation and any action we take balances disease risk against potential impact on trade. Given the need for rapid decision-making, we invite comment on it, once it is published on the website. We would also welcome any comments from the effective country.

Our qualitative RAs are based on the general principles of the OIE (World Organisation for Animal Health) framework. We have adapted these principles to recognise that we are looking at a possible change in the threat to the UK from a change in the disease situation in an exporting country.

2. Qualitative risk analysis

2.1 When it is carried out

We carry out a qualitative risk analysis (RA), when officially notified of an outbreak of animal disease in a Member State of the European Union (EU), a country on the border of the EU or one of the UK's trading partners worldwide. When we receive unofficial reports of a disease outbreak, we seek clarification from the European Commission or the country which may be affected before starting a risk assessment.

Once an official notification has been received, we aim to prepare an RA within 24 hours of disease being notified and publish it on our website. However, we continue to monitor developments and would revise the published RA if there is a significant change to the threat to the UK. As the situation improves, our safeguard measures would be reduced progressively and eventually lifted. We do not usually revise our published RA as the threat diminishes.

We use a qualitative approach rather than a quantitative approach because we aim to publish the RA within 24 hours of a notified outbreak. As there is often a shortage of reliable quantitative data, the results may be difficult to interpret and may not necessarily be any more objective than a qualitative description of the risk.

2.2 Uncertainty we face

The European Commission or OIE (World Organisation for Animal Health) provide official notifications that contain information provided by the official veterinary services of the affected country. The initial level of detail may vary on a country-by-country basis.

We are obliged to work with the information that is available to us and this often introduces many uncertainties. For example:

- the true extent of a disease outbreak may be unknown in its early stages, even to the veterinary services of the affected country;
- the amount of fresh meat brought into the UK from other EU member states, under EU single market rules is not recorded centrally, although consignments could be traced using individual commercial documents if necessary;
- scientific knowledge on the transmission of some diseases in certain commodities is incomplete.

However, we endeavour to highlight such uncertainties when they may affect our assessment of risk. We take a precautionary approach to mitigate the risk to the UK and ban import of risk commodities that cannot reasonably be assessed as presenting negligible risk. However, we would re-assess the risk if uncertainty can be reduced when more information becomes available.

2.3 Hazard assessment

The hazard is the infectious agent responsible for a disease outbreak.

2.3.1 *The hazard to be assessed*

We focus on animal diseases which are not present within the UK and which could have a significant impact on animal health if they were to be introduced to the UK.

With regard to the officially notified outbreak, we collate information in order to understand:

- The geographical location and extent of the outbreak
- The species and numbers affected
- The characteristics of the infectious agent

- When infection was introduced and when it was detected
- The effectiveness of the control measures taken by the affected country.

With regard to risk, we assess:

- Is there an increased risk of UK livestock becoming infected as a result of this disease outbreak?
- Is there a risk that UK livestock have already been infected as a result of this disease outbreak?

2.4 Risk assessment

We estimate the likelihood of the hazard being associated with imported risk commodities.

2.4.1 Release assessment

This is a consideration of all possible pathways by which viable infectious agent may be introduced to the UK from the affected country or region by risk commodities. Different scenarios may be applicable to each outbreak, depending on the disease concerned, our trade relationship with the affected country and the risk from illegal import.

2.4.1.1 Legal trade

- Legal imports of live animals and germplasm: (consigned before disease was detected): we can usually identify these from computerised records. Control measures that have been applied such as pre-export quarantine and testing may be taken into consideration.
- Legal imports of animal products: Animal products are traded freely within the EU single market and there is usually no detailed information on consignments available. If imported direct to the UK from a third country then our Border Inspection Posts (BIPs) will have a record of their arrival. The effects of processing, transport time and controls such as deboning of meat are considered.
- Legal personal imports of animal products: Travellers from European countries are permitted to bring small quantities of animal products into the UK for their own use. The volume of these commodities is not quantifiable. If a disease outbreak occurs within the EU then controls such as protection and surveillance zones are put in place to prevent products from infected animals reaching the market. Products from animals in a controlled area which are not believed to be infected may be restricted to their national market and it is possible that these could be brought to the UK as personal imports.

2.4.1.2 Illegal trade

- Illegal imports of live animals and germplasm: Small species and germplasm could be concealed in other consignments and larger animals may be imported to the UK on false certification. Live animals are more

difficult to smuggle than products. Checks are carried out at Border Inspection Posts, premises of destination and in-transit. On occasions, non-compliant consignments are found, however, these are rarely considered to pose a disease risk and are exported or destroyed. We work with importers and their representative bodies to raise awareness of the importance of complying with rules for certification.

- Illegal imports of animal products: We have access to databases of seizures by relevant UK authorities, which give us some indication of the scale of illegal imports from different third countries. They include illegal personal imports and illegal commercial activity. Checks are targetted on the basis of risk and intelligence information, for example known markets for illegal products.

2.4.1.3 Other human activities

It is not possible to quantify these activities.

- Objects that have been contaminated: returning livestock vehicles which have not been disinfected, containers for animal products etc.
- Movement of people: tourism, for example. This is generally regarded as part of the background risk for the introduction of disease from regions where it is endemic. Disease could be spread through illegal personal imports (see above), but also by manure carried on footwear for example.

2.4.1.4 Uncontrollable natural phenomena

It is not possible to quantify these phenomena.

- Migrating birds for avian diseases: Migration routes and seasonal patterns are reasonably well understood.
- Windborne spread: Well understood for relevant diseases, for example FMD.
- Arthropod vectors: blown on the wind or carried in means of transport.

2.4.2 Exposure assessment

The exposure assessment consists of describing the biological pathways necessary for exposure of animals in the importing country to the hazard. We do not carry out a detailed exposure assessment when we have concluded that there is negligible risk of the hazard being introduced to the UK through legal trade.

We assume that if infected live animals or germplasm are imported, then they would be likely to contact susceptible UK animals and to transmit disease.

We assume that if significant quantities of infected animal products are imported then they could come into contact with UK livestock, by the routes identified below and could result in infection.

2.4.2.1 Other human activities

It is not possible to quantify these activities.

- Illegal waste food feeding; including feeding to pet pigs.
- Visits to the countryside: This includes ways by which contaminated animal products could be transported to livestock holdings where they are deliberately or accidentally fed to susceptible species.

2.4.2.2 Uncontrollable natural phenomena

It is not possible to quantify these phenomena.

- Scavenging of landfill sites: by wild or feral birds and animals that may be susceptible to diseases transmitted in meat or other animal products.

When there is a credible route of introduction through other human activities or natural phenomena, then we assume that susceptible species in the UK could become infected.

2.4.3 Consequence assessment

We do not carry out a detailed consequence assessment; we are concerned with animal disease that have high impact on the UK animal health, so the consequences of an outbreak are assumed to be unacceptable because of potential damage to the UK's rural economy, export industry and costs of implementing control measures.

However, the impact of a disease outbreak could be reduced. For example, in the case of Newcastle disease, the UK permits routine vaccination.

2.4.4 Risk estimation

We summarise the estimates of previous assessments to help us decide if we need to take any measures to reduce the risk of the disease introduction via trade. We consider that the appropriate level of protection (ALOP) for legal trade to be permitted is a negligible risk of animal disease of concern. We report the estimate of risk of introduction of diseases using the following terminology:

- Negligible – not worth considering; insignificant.
- Low – more than negligible. Comparable to the background level of risk through illegal imports or uncontrollable routes.
- High – Introduction of disease is probable. Comparable to the risk due to importation of live animals which have been exposed to infection. UK livestock likely to be exposed through contact with imported animals or germplasm.

However, we recognise that it is not possible to fully know the risk of disease introduction through illegal imports or other human activities from the affected countries

or countries where the disease is endemic, or because of uncontrollable natural phenomena.

2.5 Risk management

When there is a high or low risk, International Animal Health Division will act quickly to tackle it, usually by implementing EU safeguard measures. We may also take unilateral safeguard measures to block legal imports from countries or regions with outbreaks of disease. We will also trace and check any recent imports of animals that may present a risk. However the action which we may take is constrained by OIE rules and EU law, in order to prevent raising unnecessary trade barrier.

If we identify a low or high risk to UK livestock, perhaps from animals imported from an affected area before disease was detected in the exporting country, then other measures may be necessary, for example:

- increased awareness among livestock keepers
- increased surveillance
- heightened state of preparedness of emergency response

If the disease is zoonotic and present a risk to human health then we inform the Food Standards Agency and Health so that they can consider any necessary action.

2.6 Risk communication

We publish our risk assessments on the website. These are also available for scrutiny by the affected countries. We invite anyone, including affected countries, to provide comments on our RAs. Summary reports are also regularly distributed within Government, published in the Veterinary Record and posted on this website. They aim to raise awareness that animal disease outbreaks occur regularly around the world and can present a threat to the UK through to travel and trade.